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CLAIMS:

What is claimed is:

- Sub
as
1. A method in data processing system for performing an operation using a key comprising;
 - receiving a call to perform the operation using the key;
 - identifying a routine to perform the operation;
 - identifying a keystore containing the key;
 - creating a data structure used by the routine to execute the operation;
 - sending the data structure to the routine.
 2. The method of claim 1 further comprising:
 - determining whether the key is located in the keystore; and
 - responsive to the key being absent from the keystore, inhibiting the sending step.
 3. The method of claim 1, wherein the routine and the keystore are identified using the data structure.
 4. The method of claim 3, wherein the data structure is a configuration associated with an application originating the call.
 5. The method of claim 1, wherein the keystore is one of a virtual keystore, a keystore, an adapter, and a keystore in a smart card.
 6. The method of claim 1, wherein the routine is a

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Common Data Security Architecture plug-in.

7. The method of claim 1 further comprising
initializing the routine prior to sending the data
5 structure to the routine.
8. The method of claim 1, wherein the call is received
from an application and further comprising:
receiving a result from the operation; and
10 returning the result to the application.
9. The method of claim 8 further comprising:
responsive to receiving the result, performing any
necessary updates to objects in the keystore.
15
10. A cryptographic system for use in a data processing
system comprising:
a security layer;
a plurality of cryptographic routines, wherein the
20 plurality of cryptographic routines are accessed through
the security layer;
a keystore; and
a keystore application program interface layer
coupled to the security layer, wherein the keystore
25 application program interface layer receives a call from
an application to perform a cryptographic operation,
identifies a routine, calls the routine to perform the
cryptographic operation, receives a result from the
routine, and returns the result to the application.
30
11. The cryptographic system of claim 10, wherein the

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security layer is a Common Data Security Architecture layer.

12. The cryptographic system claim 10, wherein the plurality of cryptographic routines are a plurality of plug-ins.

13. The cryptographic system of claim 10, wherein the keystore is within a plurality of keystores and wherein the keystore application program interface layer identifies the keystore form the plurality of keystores.

14. The cryptographic system of claim 10, wherein the routine and the keystore are identified in the data processing system accessed by the keystore application program interface layer.

15. The cryptographic system of claim 10, wherein the keystore application program interface layer performs updates to the keystore in response to receiving the result from the routine.

16. The cryptographic system claim 10, wherein the
keystore application program interface layer initializes
the routine used to perform the cryptographic operation.

17. A data processing system for performing an operation using a key comprising;

receiving means for receiving a call to perform the operation using the key;

first identifying means for identifying a routine to

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perform the operation;
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        creating means for creating a data structure used by
the routine to execute the operation;

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18. The data processing system of claim 17 further comprising:

responsive to the key being absent from the keystore, for inhibiting the sending step.

20. The data processing system of claim 19, wherein the data structure is a configuration associated with an application originating the call.

22. The data processing system of claim 17, wherein the routine is a Common Data Security Architecture plug-in.

23. The data processing system of claim 17 further

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comprising initializing the routine prior to sending the data structure to the routine.

24. The data processing system of claim 17, wherein the
5 call is received from an application, and wherein the receiving means is a first receiving means, further comprising:

second receiving means for receiving a result from the operation; and

10 returning means for returning the result to the application.

25. The data processing system of claim 24 further comprising:

15 performing means responsive to receiving the result, for performing any necessary updates to objects in the keystore.

26. A computer program product in a computer readable
20 medium for performing an operation using a key, the computer program product comprising;

first instructions for receiving a call to perform the operation using the key;

25 second instructions for identifying a routine to perform the operation;

third instructions for identifying a keystore containing the key;

fourth instructions for creating a data structure used by the routine to execute the operation;

30 fifth instructions for sending the data structure to the routine.

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